

I hereby certify that this correspondence is being deposited with the U.S. Postal Service with sufficient postage as First Class Mail, in an envelope addressed to: MS Appeal Brief, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date shown below.

Dated: 5/23/05 Signature: Joyce Krumpke
(Joyce A. Krumpke)



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re Application of: Latarnik et al.

Conf. No.: 6044

Serial No.: 10/018,269

Group Art Unit: 3683

Filed: April 25, 2002

Examiner: Sy, Mariano

For: METHOD FOR PRESSURE MODULATION OF BRAKE PRESSURES

Attorney Docket No.: AP9627

Commissioner for Patents
MAIL STOP Appeal Brief - Patent
P.O. Box 1450
Alexandria, VA 22313-1450

CORRECTED BRIEF ON APPEAL

Honorable Sir:

Fees

No fee is believed due with the filing of this Corrected Brief on Appeal. The Appeal Brief for the above-identified matter was originally filed on August 30, 2004 and the filing fee was charged to the undersigned's deposit account at that time. If any additional fee is due with the filing of this Corrected Brief on Appeal, it may be charged to Deposit Account 50-3145.

This Appeal is taken from the Examiner's Final Rejection dated December 31, 2003 (Paper No. 11) of Claims 13-23 in the above-identified application and further in response to the Notification of Non-Compliant Appeal Brief dated April 26, 2005. The Notice of Appeal was timely filed on June 29, 2004. Submitted herewith are two additional copies of this Appeal Brief.

S.N. 10/018,269

(i) Real Party In Interest

The Real Party In Interest is Continental Teves AG & Co. of Frankfurt, Federal Republic of Germany.

(ii) Related Appeals and Interferences

None

(iii) Status Of Claims

Claims 1-12 are canceled.

Claims 13-23 are pending in the application and herein appealed. Claim 13 is an independent claim and Claims 14-23 ultimately depend from Claim 13. The present application was filed on October 30, 2001 with a Preliminary Amendment that canceled originally-filed Claims 1-12 and added Claims 13-23. In response to a first Office action dated June 27, 2003 (Paper No. 9), Appellant amended Claims 13-19 and 22-23. In response to a final Office action dated December 31, 2003 (Paper No. 11), Appellant filed a Notice of Appeal. An Advisory Action dated June 30, 2004 acknowledged a request for reconsideration has been considered but does not place the application in condition for allowance.

The Office Action Summary of the final Office action indicates that Claims 13-23 are rejected.

(iv) Status Of Amendments

All amendments have been entered for purposes of this Appeal.

(v) Summary Of The Claimed Subject Matter

As claimed in independent Claim 13, a vehicle brake circuit is categorized into a leading wheel brake circuit portion and a following wheel brake circuit portion. The brake pressure

S.N. 10/018,269

demand of the leading and following wheel brake circuits is determined and the introducing, maintaining, and reducing the brake pressure of the following wheel brake circuit portion in dependence on the leading wheel brake circuit portion, such that a pressure fluid is introduced into the following brake circuit portion in a magnitude established by way of the leading wheel brake circuit portion

Due to the division into a leading wheel brake circuit with a higher pressure demand and a following wheel brake circuit with a lower pressure demand, the brake pressure demand of the following wheel brake circuit can always be built up from the leading wheel brake circuit. In this arrangement, the pressure fluid pump for the brake pressure adjustment furnishes only the delivery rate necessary to satisfy the brake pressure demand of the leading wheel brake circuit, there being no need to actuate the inlet valve of the leading wheel brake circuit which is open in its deenergized state. *See specification, page 5, paragraph 2.*

(vi) Grounds Of Rejection To Be Reviewed On Appeal

Are Claims 13-23 unpatentable under 35 U.S.C. § 102(b) over Burgdorf et al. (WO 96/02409, U.S. Patent No. 5,918,948 is presented as an English equivalent, hereinafter "Burgdorf")?

(vii) Argument

Claims 13-23 were rejected under 35 U.S.C. § 102(b) as being anticipated by Burgdorf. Appellant respectfully traverses this rejection, and submits that these claims are not anticipated in view of the cited prior art.

Independent Claim 13

Independent Claim 13 is separately patentable.

The Examiner asserts that Burgdorf discloses a method of modulating brake pressure of a vehicle brake circuit comprising the steps of: categorizing a vehicle brake circuit into a leading wheel brake circuit portion of wheel brake cylinder 17 and a following brake wheel brake circuit portion of wheel brake cylinder 18; determining brake pressure demands for the leading and following wheel brake circuit portions; introducing, maintaining, and reducing the brake pressure of the following wheel brake circuit portion in dependence on the leading wheel brake circuit portion, such that a pressure fluid is introduced into the following brake circuit portion in a magnitude established by way of the leading wheel brake circuit portion.

Although Burgdorf does generally disclose the same hydraulic brake system hardware as that set forth in the instant application, a close review of Burgdorf shows that nothing in Burgdorf teaches the interplay between the leading wheel brake circuit and the following wheel brake circuit. Specifically, Burgdorf does not teach the step of introducing, maintaining, and reducing the brake pressure of the following wheel brake circuit portion in dependence on the leading wheel brake circuit portion, such that a pressure fluid is introduced into the following brake circuit portion in a magnitude established by way of the leading wheel brake circuit portion.

Instead, Burgdorf teaches a parallel connection of an inlet valve 11 with a fourth non-return valve 29 and an outlet valve 12 is used for the modulation of the pressure introduced into the first wheel brake cylinder 17. *See col. 4, lines 20-25.* A second parallel connection of a second inlet valve 15 with a sixth non-return valve 40 and a second outlet valve 16 is provided to control the hydraulic pressure introduced into the second wheel brake cylinder 18. *See col. 4, lines 32-35.* During normal braking operations, pressure increase and pressure reduction in the wheel brake cylinders 17, 18 can be effected by a corresponding operation of the first braking pressure generator 1 by way of the open separating valve 10 and the open inlet valves 11, 15. *See col. 4, lines 48-52.*

Specifically, as described in column 4, line 57 – column 5, line 5, of Burgdorf, “the pressure is modulated by correspondingly switching the inlet and outlet valves 11 and 12, and the

pressure fluid discharged into the low-pressure accumulator 13 is returned by the return pump 7 until the pressure level of the master brake cylinder is reached. Upon commencement of each independently actuated braking operation, the brake power booster 5 is actuated irrespective of the driver's wish, during the starting period of the return pump 7, so that the wheel brakes 17, 18 are prefilled. The separating valve 10 is closed and the switching valve 9 is opened for further pressure increase. The result is that the return pump 7 generates a high pressure at the junction 21 which is limited by the pressure-limiting valve 28 to permit individual adjustment of the desired *independent* braking pressure in the wheel brake cylinders 17, 18 by switching the ABS inlet and outlet valves 11, 13 and 12, 16. Thus, Burgdorf et al discloses an *independently* actuated braking operation whereby individual adjustment of each wheel's braking pressure is adjusted by switching the ABS inlet and outlet valves 11, 15 and 12, 16, respectively. There is no teaching that the manipulation of the inlet and outlet valves is done in dependence on any other portion of the wheel brake circuit. Moreover, there is no teaching in Burgdorf for manipulating the inlet and outlet valves such that "a pressure fluid is introduced into the following brake circuit portion in a magnitude established by. . . the leading wheel brake circuit portion."

In contrast to Burgdorf, the claimed method of the present invention includes categorizing a vehicle brake circuit into a leading wheel brake circuit portion and a following wheel brake circuit portion and introducing, maintaining and reducing the brake pressure in the following wheel brake circuit portion in dependence on the leading wheel brake circuit portion. Nowhere does Burgdorf teach introducing, maintaining, and reducing the brake pressure of the following wheel brake circuit portion in dependence on the leading wheel brake circuit portion, such that a pressure fluid is introduced into the following brake circuit portion in a magnitude established by way of the leading wheel brake circuit portion. According to MPEP §2131, a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Therefore, the Examiner fails to establish that Burgdorf anticipates Appellant's claimed invention as in Claim 13.

S.N. 10/018,269

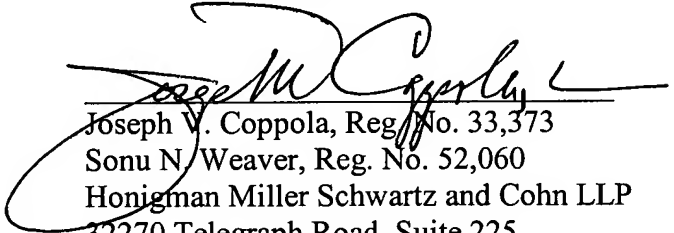
Dependent Claims 14-23

Dependent Claims 14-23 stand or fall with independent Claim 13.

Claims 14-23 ultimately depend from independent Claim 13. For at least the reasons set forth above, Claims 14-23 are patentable over the applied art.

For the above reasons, Appellant respectfully submits that Claims 13-23 are patentable over the applied art. Therefore, the Board is respectfully requested to reverse the Examiner's decision.

Respectfully submitted,



Joseph V. Coppola, Reg. No. 33,373
Sonu N. Weaver, Reg. No. 52,060
Honigman Miller Schwartz and Cohn LLP
32270 Telegraph Road, Suite 225
Bingham Farms, MI 48025
Attorneys for Appellant
Telephone: (248)566-8500

Customer No.: 44200

Claims Appendix – Claims 13-23

13. Method of modulating brake pressure of a vehicle brake circuit, comprising the steps of:

categorizing a vehicle brake circuit into a leading wheel brake circuit portion and a following wheel brake circuit portion;

determining brake pressure demands for the leading and following wheel brake circuit portions;

introducing, maintaining, and reducing the brake pressure of the following wheel brake circuit portion in dependence on the leading wheel brake circuit portion, such that a pressure fluid is introduced into the following brake circuit portion in a magnitude established by way of the leading wheel brake circuit portion.

14. Method as claimed in claim 13, wherein the leading wheel brake circuit portion is connected to a pressure fluid source by way of opening of a switch valve, and the pressure fluid is introduced into the leading and following wheel brake circuit portions by way of a pressure fluid pump arranged in the vehicle brake circuit, with the following wheel brake circuit portion being separated from the pressure fluid source by a separating valve.

15. Method as claimed in claim 13, wherein the leading wheel brake circuit portion is connected to a pressure fluid accumulator and the pressure fluid is introduced into the leading and following wheel brake circuit portions by way of a pressure fluid pump arranged in the vehicle brake circuit, wherein the leading and following wheel brake circuit portions are separated from a pressure fluid source by a separating valve.

S.N. 10/018,269

16. Method as claimed in claim 13, further including a step of controlling the brake pressure demands of the leading and following wheel brake circuit portions by way of an inlet valve of the following wheel brake circuit portion according to the brake pressure demand, wherein an inlet valve of the leading wheel brake circuit portion remains open, and outlet valves of the leading and following wheel brake circuit portions remain closed.

17. Method as claimed in claim 13, wherein the brake pressure demand of the following wheel brake circuit portion is changed by delivery out of the leading wheel brake circuit portion, wherein an inlet valve of the following wheel brake circuit portion remains open.

18. Method as claimed in claim 16, wherein brake pressure is introduced and is increased compared to the brake pressure demand of the leading wheel brake circuit portion, the inlet valve of the leading wheel brake circuit portion is closed in dependence on the brake pressure in the vehicle brake circuit or in dependence on a time constant correlated to a condition variable.

19. Method as claimed in claim 13, wherein the brake pressure in the leading wheel brake circuit portion is discharged into a pressure fluid source by way of the vehicle brake circuit by opening a separating valve.

20. Method as claimed in claim 13, wherein the brake pressure in the following brake circuit portion is discharged through a return line into a pressure fluid accumulator by opening an outlet valve when an inlet valve is closed.

S.N. 10/018,269

21. Method as claimed in claim 13, wherein the characteristics for the steps introduction, maintaining, and reduction of the brake pressure are predetermined by a pressure controller.

22. Method as claimed in claim 13, wherein a pressure fluid pump is controlled by way of a pulse-width modulated control signal, predetermined by a pressure controller during the introduction of the brake pressure into the leading and following wheel brake circuit portions.

23. Method as claimed in claim 13, wherein a pressure fluid pump is operated during the steps maintaining and reducing of the brake pressures by way of adjusting an energy supply, or a rotational speed, or a conveying capacity in a predetermined basic (load) condition.

OAKLAND.597833.3